

CLAIMS

1. Radiofrequency (RF) and/or microwave power amplification device, in particular for a radiocommunication terminal, including means for shielding said device and means for controlling a power supplied at the output of said device,
5 including a power control loop having reference means, detection means, comparison means and power amplification means, characterised in that said control means also include at least one sensor for detecting energy radiated in said device.

2. Power amplification device according to claim 1, characterised in that
10 said shielding means produce a coupling between said power amplification means and said sensor.

3. Power amplification device according to either one of claims 1 or 2, characterised in that said sensor belongs to the group including:

- inductors;
- 15 - routing lines of a printed circuit of said device;
- MEMS (Micro-Electro-Mechanical Systems);
- radiating elements printed on a printed circuit of said device;
- tuned LC or RLC circuits.

4. Power amplification device according to any one of claims 1 to 3,
20 characterised in that said power amplification means and said sensor are placed near one another, so as to optimise said coupling.

5. Power amplification device according to any one of claims 1 to 4, characterised in that said shielding means cause an attenuation of at least 10 dB of energy outside said device, detected by said sensor, with respect to said energy
25 radiated in said device, detected by said sensor.

6. Power amplification device according to any one of claims 3 to 5, characterised in that, when said sensor is a tuned LC or RLC circuit, the values of the components of said tuned circuit are selected so as to maximise said power supplied at the output at at least one predetermined operating frequency of said
30 device.

7. Power amplification device according to any one of claims 1 to 6, characterised in that said control means enable to control said power supplied at the output according to at least one parameter belonging to the group including:

- an operating temperature of said device;
- 5 - a supply voltage of said device;
- a load impedance of said device.

8. Power amplification device according to any one of claims 1 to 7, characterised in that said sensor is integrated into said detection means.

9. Power amplification device according to any one of claims 1 to 8,
10 characterised in that said shielding means include a metal shielding cover having a surface substantially parallel to a printed circuit forming the base of said device and four surfaces substantially perpendicular to said surface coming into contact with each of the edges of said printed circuit.

10. Radiocommunication terminal, characterised in that it includes a power
15 amplification device according to any one of claims 1 to 9.